Jenks (E.W.)

With the Compliments of the Author.

REPORT

UPON

OBSTETRICS.

A PAPER

READ BEFORE THE DETROIT MEDICAL AND LIBRARY ASSOCIATION, JULY 16, 1877, BY THE CHAIRMAN OF THE SECTION OF OBSTETRICS,

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Presented by the Author,

REPRINTED FROM DETROIT MEDICAL JOURNAL, SEPTEMBER, 1877.

DETROIT, MICH.:
WILLIAM A. SCRIPPS, PRINTER,
ARCADE BUILDING.

1877.

REPORT UPON OBSTETRICS.

A PAPER READ BEFORE THE DETROIT MEDICAL AND LIBRARY ASSOCIATION, BY DR. EDWARD W. JENKS.

The subject of my paper being assigned me and its length limited by the rules of this Association, it cannot be expected that I am able to give more than a very meagre report of what has been done in the obstetric world during the past year; nor shall I attempt to do more than merely allude to a few of the more practical points that have attracted attention, and which concern each of us engaged in the practice of obstetrics.

Of late the obstetric forceps, the indications for their use, the manner of using them, the kinds, and their value as compared with other obstetric procedures, have been freely discussed in medical societies and through the medical journals at home and abroad. The late Prof. Meigs made the statement that the forceps was not a pincer but an extractor. In a paper left unfinished by Prof. Hugh L. Hodge, completed by his son, and published in the *American Journal of Obstetrics*, May, 1875, exception is taken to this assertion of Meigs' as tending to restrict the practical uses of the forceps. The author claims that in narrowed pelves the fœtal head may be compressed by the forceps so as to deliver the child alive, and denies the assertion commonly made that the death of the fœtus occurring during labor is due to pressure on the brain; the brain of the fœtus is of no use, as seen in acephalous monsters, as children often survive after prolonged and severe pressure upon the cerebral mass, provided there is no rupture of tissues or an extravasation internally. If, however, the placental connections be severed for a period ex-

ceeding five minutes, the life of the fœtus is destroyed. This may be effected by various means. There can be no question that continuous pressure upon the head may produce extravasation, and safety to the child can better be insured by intermittent than continuous pressure upon body and head, and when the placenta is detached the only hope of the child's life is in speedy delivery.

As between version and forceps, this author gives his opinion decidedly in favor of forceps, holding that where the conjugate diameter is at least three inches, "delivery by suitable forceps is far more safe for the mother, and that the mortality for the child would be less."

Hodges further claims that the obstetric forceps, if well constructed, is the best extractor for dead children also, in case of craniotomy. The cephalotribe, which is a modified obstetric forceps introduced into practice by the younger Baudelocque, "should be considered the greatest improvement in operative midwifery since the seventeenth century."* Valuable statistics and practical deductions to obstetricians have been obtained from the reports of the Rotunda Lying-in Hospital, of Dublin. The annual report of the late Master, Dr. G. Johnson, as showing the forceps to be important conservators of life and health to mothers and children, has deservedly attracted much attention. Dr. Mann, in his "Report on Obstetrics," in the *American Journal of Obstetrics*, for January, 1877, has summarized a portion of this report so admirably that I quote it at length. "He (Dr. Johnson) is able to show a very low death rate; fifteen in twelve hundred and thirty-six cases, only seven of them, or one-half per cent., being from strictly puerperal causes. This he attributes in great part, to the practice of interfering to prevent the labor being protracted, thus preventing the evil consequences arising from exhaustion and long continued pressure on the soft parts. The method of interfering was generally the *application of the forceps*, and this was done, not only in cases which would be ordinarily considered as proper for this operation, but in a

*Mann, Report on Obstetrics for 1875-6. Amer. Jour. Obstet., Jan., 1877.

large number of cases (forty-two) *where the os was only partially dilated*, but dilatable. This method of operating, entirely opposed, as it is, to the generally received teachings on the subject, deserve our careful attention, as being one of the most important advances which have been promulgated within the time of our report; true, it is not entirely new, but Dr. Johnson is the first to report a sufficient number of cases, and to give rules of proceedure to place the operation on a sound basis.

The degree of dilatation varied in his cases; assuming four inches as the degree of dilatation for the head to pass, in twenty-four cases it over two-fifths dilated; in twelve it was three-fifths, and in five, four-fifths. The condition which renders the interference advisable, are, first, early escape of the liquor amnii before dilatation of the os, thereby allowing the fœtal head to press injuriously upon the soft parts of the mother. Another condition is the descent of the head directly upon the cervix, without the intervention of the bag of water, the result being the same in both cases. In one case prolapse of the funis, and in another placenta prævia were considered conditions warranting the operation. The position of the head varied; in eleven instances it was above the brim; in seventeen in the brim, and in fourteen within the cavity of the pelvis.

Dr. J. has now operated in one hundred and thirteen cases and has never failed, thus certainly demonstrating that our old ideas as to the applicability of the forceps are destined to undergo a change. It probably will not soon become common practice to apply forceps in every case of labor tedious in the first stage. Still, as Dr. McClintock remarks, it is a great consolation to know that when the head is high up in the brim and the os not fully dilated, should any emergency arise demanding immediate interference, we may have recourse to the forceps with probable safety to both mother and child."

In Playfair's admirable work on obstetrics, published in the United States during the past year, is a very careful discussion upon obstetric operations. This author is an advocate of the early and more frequent use of the forceps than is customary in Great Britain, and recommends their application even to the ex-

tent carried out by Dr. Johnson, in the Rotunda Hospital. With reference to the effects of early interference as to the life of the child he makes a forcible comparison between the general mortality of one out of every twenty or thirty children and the results obtained by Dr. Hamilton, of Falkirk, who used forceps on an average once in every seventh or eighth case, and delivered 731 successive children without a single still-birth.

At the last meetings of the Michigan State Medical Society and the Obstetric Section of the American Medical Association, the uses of the obstetric forceps were discussed; in the latter society the discussion was participated in by many who are acknowledged as authority on subjects pertaining to obstetrics and gynæcology. At neither society were there any important statistics of American obstetric practice exhibited, but individual experiences and views were presented, all tending to show the life conserving power of the obstetric forceps in skilled hands. Your reporter is convinced that among skillful American obstetricians the custom prevails of having recourse to the forceps fully as often, with the same conditions, as they have been used by the Dublin obstetrician and his followers; and his statistics are none the less valuable, inasmuch as they show the views of their compiler and at the same time reflect the opinions of the best obstetricians of our day.

As apropos to the subject of the use of forceps it may be well to add a word as to the kinds. Your reporter has long maintained that it matters but little what particular pattern of forceps the obstetrician uses if he has a sufficiently strong pair and is skilled in their use. This assertion, while believed to be true if taken in its broadest sense, may require a certain amount of qualification. It is, however, based upon the fact that most of the forceps now used are modifications of the Baudelocque instrument. I would exclude from the obstetricians' armamentarium the small, straight forceps that are of no use except to ornament the cases of our surgical instrument makers. Some of the smaller forceps having the pelvic curve may be serviceable when applied in the inferior strait, but seem to possess no mechanical advantage over the larger instruments.

Prof. Tarnier, of Paris, has lately invented a new obstetric forceps which has attracted considerable attention and criticism. He enumerates several defects in the common long forceps, as follows: 1st. That they never permit the operator to make traction to the axis of the pelvic canal. 2d. That they do not leave the fœtal head sufficient mobility to allow it to follow freely the curve of the pelvis. 3d. That they are not provided with any indicator to show the accoucheur in which direction he ought to make traction.

The forceps of Tarnier, of which the accompanying diagram* will give you some idea, seems to be a complicated instrument, and yet it is quite simple in construction. It consists of two parts; first, a pair of prehensile branches, which resemble ordinary forceps, except that the handles are curved backwards so that their extremity lies in the prolonged axis of the blades—that is to say, in precisely that axis of the pelvis in which traction ought to be made. These are not used for traction, but simply grasp the head, and are held together by a screw. The second part consists of two traction rods, which are articulated freely at a joint near the lower part of the fenestræ and in the axis of the blades. These are not crossed but parallel; they have the same curve as the prehensile branches, lie close beside them when in position for traction, and end in a strong transverse handle, which gives a powerful hold to the hands. Each traction rod is introduced, together with the corresponding prehensile branch, and the adjustment is said to be as easy as with the ordinary forceps.

Prof. Tarnier claims for this instrument in contradistinction to the ordinary forceps, the following qualities: 1st. That it permits the operator always to make traction in the axis of the pelvic canal. 2d. That it leaves the fœtal head mobility enough to allow it to follow freely the curve of the pelvis. And 3d. That it provides an indicator which shows the accoucheur the precise direction in which at any moment he ought to make his traction. This instrument can only be conveniently applied

*In Annales de Gynécologie, March, 1877.

with the woman in the dorsal position, and therefore does not meet with very favorable opinions by the leading British obstetricians.

Prof. Pajot has severely criticised the instrument in the *Anales de Gynécologie* for March, and Prof. Tarnier replied in the April number of the same journal, giving a better description of the mechanism of the instrument, and the manner of its use and advantages over other instruments than in his first memoir. "The Obstetrical Journal of Great Britain and Ireland" says that as regards its shape we think that this form of forceps is well worthy of the attention of British obstetricians. Your reporter is of the opinion that the name of the distinguished inventor of itself entitles the forceps to consideration aside from their intrinsic merit; and further that their trial by a number of obstetricians will be quite liable to prove much that is claimed for them when they are applied to the fœtal head within or above the pelvic brim.

At the meeting of the American Gynecological Society held in Boston, in June last, Dr. Skene read a valuable paper upon "The Principles of Gynecological Surgery Applied to Obstetric Operations," in which he called attention to the facility with which craniotomy could be performed by the aid of Sims' speculum; also to the aid afforded by means of the speculum in applying Dr. Thomas' method of treating prolapsus of the funis. A case was related in which the cord was pushed back by means of sponges, held in long holders through the speculum, and with greater ease and better results than when the cord was reduced in the manner recommended and ordinarily employed. He suggested the use of the same means in the treatment of arm presentation, pushing the presenting part back by means of the sponges through the speculum. Reference was made to cases where Barnes' dilators were introduced through the speculum with greater facility than could be done otherwise. The doctor also mentioned what he had previously stated of the advantages of the speculum in introduction of the tampon and in removing the ovum in retarded abortion. Your reporter for several years has made use of the speculum for the purpose of in-

troducing the tampon and for removing the ovum in retarded abortion by means of an ovum forceps or scoop, and fully agrees with Dr. Skene in the advantage of the practice he advocates over the older methods.

In the discussion which followed the reading of this paper Dr. Lusk remarked that when the cephalotribe was used it was preceded by perforation, and when the cranioclast was used it was necessary to disarticulate the bones of the head before the instrument was applied, and in both of these operations he could understand how the suggestion made by Dr. Skene would be of value.

In cases of deformed pelvis the old practice of exviscera-tion, amputation, or long continued intra-uterine manipulation of any kind is attended with so much risk to the life of the mother that leading obstetricians seem to favor a revival of the old operations of Cæasrean section, and *gatsro-elytrotomy* in many cases, with a probability of saving fœtal life in some instances, and attended with no greater, but even less danger to the mother. That these latter operations should not be performed where cephalotripsy or cranioclasm can be easily done is a matter of question, but in mal-presentations the long and sometimes fruitless attempts at version where mutilation of the child becomes necessary, especially in a narrowed pelvis, the danger to the woman's life is fully as great in many instances as from *gastro-elytrotomy* or even the Cæsarean section.

Your reporter has recently had a successful case of Cæsarean section in consultation with Drs. Flintermann and Torrey, where the woman made as good a recovery as could be asked for, with no more apparent trouble after the first twenty-four hours succeeding delivery, than attends the easiest of child-births. The details of this case he does not desire to repeat in this connection, as they will be given fully elsewhere, simply adding that the occasion of the operation was a deformed pelvis, the conjugate diameter of the superior strait being but two inches, the presentation of the fœtus was the right shoulder; version proved to be impossible or any other intra-vaginal obstetric operation for the delivery of the child, owing to the angularities

of the parturient canal and want of room produced by the narrowing at the brim of the pelvis. *Gastro-elytrotomy* might have been performed in this case, but it was thought best, owing to the mal-position of the child and the many days she had been in labor, to make Cæsarean section, with but little expectation of her recovery. The writer attributes the woman's recovery, in a great measure, to the absence of intra-uterine manipulation preceding the operation.

The operation of *gastro-elytrotomy* has been revived by Dr. Thomas, who was not successful in his first case in saving the life of the mother, but delivered the child alive. Dr. Skene has been successful in two cases, the last one very recently, in saving both mother and children. Dr. Thomas' patient was moribund. It is too frequently the case such an operation as this or the Cæsarean section is not proposed until the woman is exhausted by long continued labor and the previous attempts at delivery.

Gastro-elytrotomy is so new a procedure that statistics concerning it are exceedingly limited, but theoretically it is a simple operation and promises far more in its results than the Cæsarean section or even cephalotripsy. It consists in making an incision just above and parallel with Poupart's ligament from the symphysis pubis to the anterior superior spine of the ilium, holding back the peritoneum as in the operation for ligature of the iliac arteries, opening the vagina at its junction with the cervix, and extracting the child by version.

The uses of anæsthetics in parturition is as yet a somewhat unsettled question. There is no question about their advantages in the more serious obstetric operations, but only with reference to their use in the simpler forms of labor are their any differences of opinion. There have not been many important papers published during the past year by either American or British obstetricians, but in the French medical societies there has been considerable discussion, which has been summarized in the medical journals of Paris. In the *Revue des Sciences Médicale* for April, 1877, is a brief synopsis entitled "*De l'emploi des Anesthésiques dans les Accouchments*, par Blot, *(Soc. de Chir.*,

p. 691, 1876.) of which the following is a translation: "One does not know how to say enough against the baneful employment of anæsthetics in obstetrics, and it is important to establish rules for its indications. M. Blot reports the case of a primipara in which the intolerable neuralgic pains and the retraction of the cervix uteri under the influence of these pains, yielded to an incomplete anæsthesia from chloroform. He cites another case where the extreme violence of these pains had interrupted labor, and where chloroform permitted the accouchment to terminate rapidly.

Polaillon admits, with Blot, that anæsthesia is rarely indicated; thus with eighteen women he has tried rectal injections of hydrate of chloral, and has observed that in the great majority of cases labor was prolonged; the head rested upon the vulva, the child was in danger, and it was necessary to terminate labor by the forceps. Lucas, Championière, Polaillon, and Perrin remarked that an incomplete anæsthesia is sufficient, and may be produced by a few drops of chloroform, in order to diminish the pain, stop the spasmodic condition and rapidly terminate labor. It seems, then, that chloroform acts as an antispasmodic and not as an anæsthetic; an essential difference which separates obstetrical anæsthesia from surgical anæsthesia. In the first the remedy acts upon the genital organs and calms the pains without disturbing the sensibility or intelligence; in the latter the suppression of sensibility arrives only in the second period, and is generally preceded by the abolition of intelligence."

At the last meeting of the American Gynecological Society Dr. Lusk, of New York, read a valuable and instructive paper entitled, "On the Necessity of Caution in the Employment of Chloroform during Labor,*" and submitted the following propositions: 1. Deep anæsthesia carried to a point of complete abolition of consciousness, retards and sometimes suspends uterine action. It was that fact that made it so valuable in many cases, but safety required that the patient should come

*Vide Amer. Jour. of Obstet. for July, 1877.

partially from under the influence before complete delivery was effected in order to avoid hæmorrhage.

2. Chloroform, even when given in the usual obstetric fashion, might, in exceptional cases, so far weaken uterine action as to create the necessity for ergot and the forceps.

3. Patients in labor do not enjoy any absolute immunity from the deleterious effects of chloroform. Cases were related.

4. Chloroform should not be given in the third stage of labor. Cerebral anæmia, from any cause, enhances the risk of anæsthesia.

5. The more remote influence of large doses of chloroform during labor upon the puerperal state is a subject which calls for future investigation and inquiry.

In the discussion which followed the reading of this paper Dr. Wilson, of Baltimore, remarked that the cases of death from chloroform in labor related by Dr. Lusk were the first of which he had heard. He always felt the most perfect confidence in the agent. He had used it 28 years and administered it between two and three thousand times without a single case of post partum hæmorrhage or the slightest ill effects following or attending its administration.

Dr. Albert Smith, of Philadelphia, regarded the paper as one of great interest and fully endorsed all the apprehensions expressed by Dr. Lusk regarding the use of chloroform in ordinary obstetric practice. In his own practice he employed Squibbs' ether, believing that it possessed all the advantages of chloroform and could be used with absolute safety. He employed it in ordinary cases. Yet there were cases in which a rapid and perfect loss of consciousness was desired, and under such circumstances advantage might be derived from the use of chloroform. For example, in hæmorrhagic abortion where an absolutely relaxed condition was desirable for the purpose of giving the opportunity to carry the finger instantly to the fundus of the uterus for the removal of the ovum ; in such cases he always used chloroform, because for the short time the patient was under its influence, as a rule, rendered it safe."

The writer has long since decided as to his own rules of

practice regarding the use of anæsthetics in obstetrics. 1st. That they may be given to the extent of producing partial loss of consciousness in any stage of labor without doing harm. 2. That complete anæsthesia, except in convulsions and the more important and painful obstetric operations, is to be avoided, as it lessens the contractile power of the uterine and abdominal muscles and thus protracts labor. 3. Even in convulsions, if there is much venosity of the surface or imperfect respiration, anæsthetics, particularly chloroform, must be used with extreme caution. 4. Complete anæsthesia very markedly protracts the third stage of labor, and renders the woman more liable to post partum hæmorrhage. 5. Chloroform is preferable to ether, except when profound anæsthesia is required for a protracted period.

The use of "*Hydrate of Chloral in Obstetric Practice*," is the title of a very excellent paper in the Gynecological Transactions,* by Dr. Richardson, of Boston. It seems to be well established that this drug is a valuable acquisition to our list of remedies for certain complications and morbid conditions incident to child-birth. Dr. Richardson gives a report of clinical cases in the paper in support of his views. He recommends chloral in the vomiting of pregnancy, grs. xv, a quarter of an hour before meals, or if not tolerated, grs. xxx per rectum at first, and then by the mouth subsequently. In after pains sometimes combined with ergot. As an anæsthetic during labor for the relief of short sharp pain. In puerperal convulsions this author recommends the combination of chloral with bromide of potassium. For the *insomnia* which not unfrequently follows tedious and exhausting labors "chloral in thirty grain doses will be followed by the greatest possible benefit." He does not look upon it as a perfectly satisfactory anæsthetic agent, but "as a valuable remedy for the relief of those affections of the nervous system which so frequently occur in obstetric practice, it seems fairly to deserve to be more widely known among the medical profession than it is at present."

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*Op. Cit., p. 246.

Your reporter is able to corroborate, in the main, from his own clinical experience, the opinion of Dr. Richardson concerning the value of chloral in obstetric practice, more particularly as to its great service in lessening the intensity and aggravating character of pain in the first stage of labor; for the sleeplessness which often follows tedious and exhausting labors, and in threatened as well as existing puerperal mania. Experience of its use in puerperal convulsions has been so very satisfactory that he can speak even more positively than Dr. Richardson as to its great value. The manner of administration in convulsions has usually been from thirty to sixty grains in solution per rectum without the combination of bromide of potassium, and repeated every hour as long as required. The use of chloral subcutaneously is apt to produce suppuration. Nor can he conscientiously speak with any degree of favor of its injection directly into the veins, as recommended and practiced by some French physicians. It can be introduced into the system safely only by the mouth or by the rectum.

The causes, prophylaxis and treatment of puerperal diseases have found a prominent place in recent obstetric literature, to such an extent that they can scarcely be alluded to in this report, as it has already exceeded the time allowed under the rules. The readers of medical journals are doubtless familiar with the important discussions which have recently occurred in the London Obstetrical Society upon the subject of puerperal fever. Dr. Fordyce Barker, of New York, in the discussion of July, 1875, stood almost alone in the society in defence of the theory that puerperal fever is a distinct and specific fever attacking puerperal women only. Many who had heretofore held similar views seem to be more inclined to the opinion expressed by Dr. Priestly, that puerperal fever is simply a blood poisoning, a septicæmia such as is observed in other than puerperal patients, modified, perhaps, by the peculiarities of the system in a puerperal state, but still not constituting a separate pathological genus, as the origin of the poisons is either autogenetic in the patient's own system or heterogenetic, imported from without, the auto-infection or hetero-infection of Schrœder.

In the first the poison is disorganization, or death of tissue—as a piece of placenta, dicdua or blood clot retained, or some laceration in the parturient canal may be either the seat of decomposition or absorption. As to the hetero-infective form of puerperal fever the question arises, whence comes this poison? Of the contagiousness of puerperal fever there can at this day be no question, but if we class the two former mentioned under the one head of puerperal fever, we may with propriety ask if the auto-genetic and hetero-genetic are equally contagious? In the preface to the voluminous work of Hervieux[1] occurs the following: *Un mot, un seul mot, avait suffi pour dissiper toutes les obscurités qui enveloppaient cette question si ténébreuse et en apparence si complexe des épidémies puerpérales. Ce mot est*: POISON *Il y a un poison puerpéral, donc il y a un empoisonnement puerpéral.*[2]

Among recent authors opposed to the doctrine of a specific poison giving rise to puerperal fever is Winckel, whose work on CHILD-BED, translated by Dr. Chadwick and published in this country, is deserving of careful study.

At the last meeting of the Michigan State Medical Society, Dr. Wade, of Holly, read a carefully prepared and ingenious paper upon Puerperal Bacteræmia, iu which he claimed, as well as I can remember, that bacteria were the chief factors of all forms of puerperal diseases. This is a question which must remain unsettled until the part of bacteria in the production of any kind of disease is better understood.

There are some problems still unsolved concerning the pathogenesis of puerperal diseases, which have been merely alluded to. Your reporter confesses that he is quite disinclined to leave thus abruptly this great and important subject of puerperal diseases without further discussion of some of the questions which have arisen and been ably discussed in the obstetric

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1 Hervieux Traité Clinique et Pratique des Maladies Puerpérales Suites de Couches, Paris, 1870

2 A word, a single word, should suffice to dissipate all the obscurity which envelopes this dark and apparently complex question of puerperal epidemics. This word is *poison*. There is a puerperal poison, therefore there is a puerperal poisoning.

world during the past year or two. The subject seems almost exhaustless, and yet is fraught with the deepest interest. Of greater importance, however, than the pathology of puerperal diseases, or even their treatment, is their prophylaxis; this should be the end and aim of all our inquiries. Our duty as obstetricians is to guard our patients by every means in our power (which I cannot now discuss) against the noxious influence of poisons from within and from without, whether septicæmic or the product of contagion.